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A NEW SPECIES OF *DENTATISYLLIS* (SYLLIDAE: POLYCHAETA) FROM CAPE VERDE ISLANDS, WEST AFRICA

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Abstract.—*Dentatisyllis junoyi,* a new species of Syllinae (Syllidae: Polychaeta) from the Cape Verde Islands off the Atlantic coast of Africa, is described. This species is characterized by having blades of short spiniger-like setae with rounded and indistinctly bifid tips and blades of falcigers with the proximal tooth larger than the distal tooth and the margin with long, distally directed subdistal spines.

The only work exclusively devoted to polychaete annelids from the Cape Verde Islands to date is that of Rullier (1964). Other works that mention species from these islands are those of McIntosh (1885), Fauvel & Rullier (1957, 1959b) and Kirkegaard (1983). A third group dealing more generally on species from the western coast of Africa are those of Augener (1918), Fauvel (1953), Fauvel & Rullier (1959a), Day (1967), and Hartmann-Schröder (1974).

Samples containing the new species of *Dentatisyllis* reported herein were collected during the "I Expedición Ibérica" to the archipelago in August, 1985. A provisional list of polychaetes found in these samples now includes about 70 species. The generic diagnosis for *Dentatisyllis* was given by Perkins (1981), and is not included here.

Specimens of the type series have been preserved in permanent microscopic slides in glycerine jelly except for the holotype and are deposited in the Museo Nacional de Ciencias Naturales de Madrid (MNCNM), Madrid, Spain. The holotype is preserved in 70% ethanol.

Descriptions, measurements, and figures have been prepared with the use of a compound microscope provided with differential interference-contrast optics (Nomarsky) and a camera-lucida drawing tube. Measurements reported are from the holotype; length measurements do not include antennae and anal cirri; width measurements were taken across the proventricular level and do not include parapodia, setae, and dorsal cirri.

Family Syllidae Grube, 1850
Subfamily Syllinae Grube, 1850
Genus *Dentatisyllis* Perkins, 1981
Dentatisyllis junoyi, new species
Fig. 1A–M

Material examined.—Cape Verde Islands: Off Curral Velho (15°58′N, 22°48′W; Boavista Island); sand; 15 m depth; holotype (MNCNM, 1601/802). Off Salamanza (16°54′N, 24°57′W; Sao Vicente Island); *Halimeda*; 3 paratypes (MNCNM, 1601/803).

Etymology.—The species is named in honor of Dr. Juan Junoy Pintos, Departamento de Biología Animal, Universidad de Alcalá de Henares, eminent benthologist who has also worked on polychaetes.

Description.—Body long, slender, cylindrical, without color markings, 5.2 mm long, 0.24 mm wide, 55 setigers. Prostomium oval, wider than long, with 4 eyes in open trapezoidal arrangement. Eyespot not seen. Palps stout and triangular, fused dorsally at bases, somewhat longer than prostomium. Median antenna originating on about mid-

dle of posterior half of prostomium, nearly twice as long as lateral antennae and longer than prostomium and palps together, with 17 articles (up to 22 in paratypes), on short ceratophore; lateral antennae with 11–12 articles (up to 15 in paratypes), originating near anterior margin of prostomium. Peristomial segment laterally distinctly separated from prostomium, dorsally covered by first setiger; dorsal tentacular cirri 1.5–2 times longer than ventral tentacular cirri, with 13–17 articles; ventral tentacular cirri with 7 articles (Fig. 1A). Dorsal cirri of first setiger longer than median antenna, with about 20 articles. Dorsal cirri of midbody segments all longer than body width, alternating in length; short cirri with 7–9 articles; long cirri with 14–17 articles (Fig. 1C). Articles of dorsal, tentacular, and anal cirri and antennae with greenish, spiral-shaped inclusions. Parapodia short and cylindrical. Ventral cirri digitiform, longer than parapodial lobes (Fig. 1C). Anterior parapodia each with about 8–12 compound heterogomph setae, blades slender, bidentate, with distal teeth somewhat hooked and margin provided with short spines; 2–3 uppermost spines very long extending to proximal tooth; blades of setae of anterior segments markedly differing dorsally to ventrally in length and shape; 24 μm above, diminishing to 13 μm below; proximal tooth of blades of setae longer than distal tooth, even longer ventrally (Fig. 1D). Toward midbody uppermost 1–2 blades of compound setae progressively more slender and proportionally longer, becoming spiniger-like, distally becoming rounded and indistinctly bidentate, with spines on margin short except distally (Fig. 1F). Blades of falcigers of midbody segments numbering 4–6 per parapodium, with short distal tooth and long, hooked proximal tooth, with slight dorso-ventral gradation in length, 17 μm above, 13 μm below (Fig. 1G). Anterior parapodia each with 2–3 acicula (Fig. 1E); acicula of posterior parapodia single, acuminate (Fig. 1K). Dorsal simple seta on posterior parapodia solitary, thin, with 2 similar teeth and short subdistal spines (Fig. 1L); ventral simple seta on far posterior setigers, solitary, stout, bidentate with small distal tooth and large proximal tooth (Fig. 1M). Pharynx long, extending through about 6½ segments in holotype (up to 8½ segments in paratypes) anterior middorsal tooth on anterior margin; anterior end of pharynx surrounded by 10 large, soft papillae and provided with a crown of 20 small teeth, only sharply seen in a paratype (Fig. 1N). Proventriculus similar in length to pharynx, extending through about 4 segments, with about 27 rows of muscle cells (Fig. 1A). Pigidium small, with 2 long moniliform anal cirri each with about 11 articles, and a short ventral appendage (Fig. 1B).

Remarks.—*Dentatisyllis junoyi* is characterized by having falcigers with an enlarged proximal tooth long subdistal spines on the distal margin of the blade, by having spiniger-like setae on middle and posterior setigers also with long subdistal spines and with bidentate tips, teeth of spiniger-like setae progressively decreasing in size and appearing rounded on median-posterior and posterior parapodia. Several species of the genus *Syllis* Lamarck, 1818 have similar falcigers but lack spiniger-like setae: *Syllis regulata* (Imajima 1966:285) differs further by having apparently unidentate dorsal simple setae and much longer cirri; *Syllis glarearia* (Westheide 1974:55) has much longer dorsal cirri and has dorsal simple setae that apparently lacks serrations; *Syllis* sp. A (Uebelacker 1984:30–134) has compound setae with enlarged blades in midbody setigers and strongly serrated ventral simple setae. Besides having falcigerous setae similar to those of *D. junoyi, Syllis lutea* (Hartmann-Schröder 1960:81, Campoy 1982: 428, San Martín 1984:370) has long-bladed falcigers with well developed serrations on blade margin, but blades have well marked distal and subdistal teeth and ventral simple setae have no enlarged proximal tooth. *Syllis cruzi* (Núñez & San Martín 1991:236) is the most similar to the new species differing only in lacking spiniger-like setae and de-

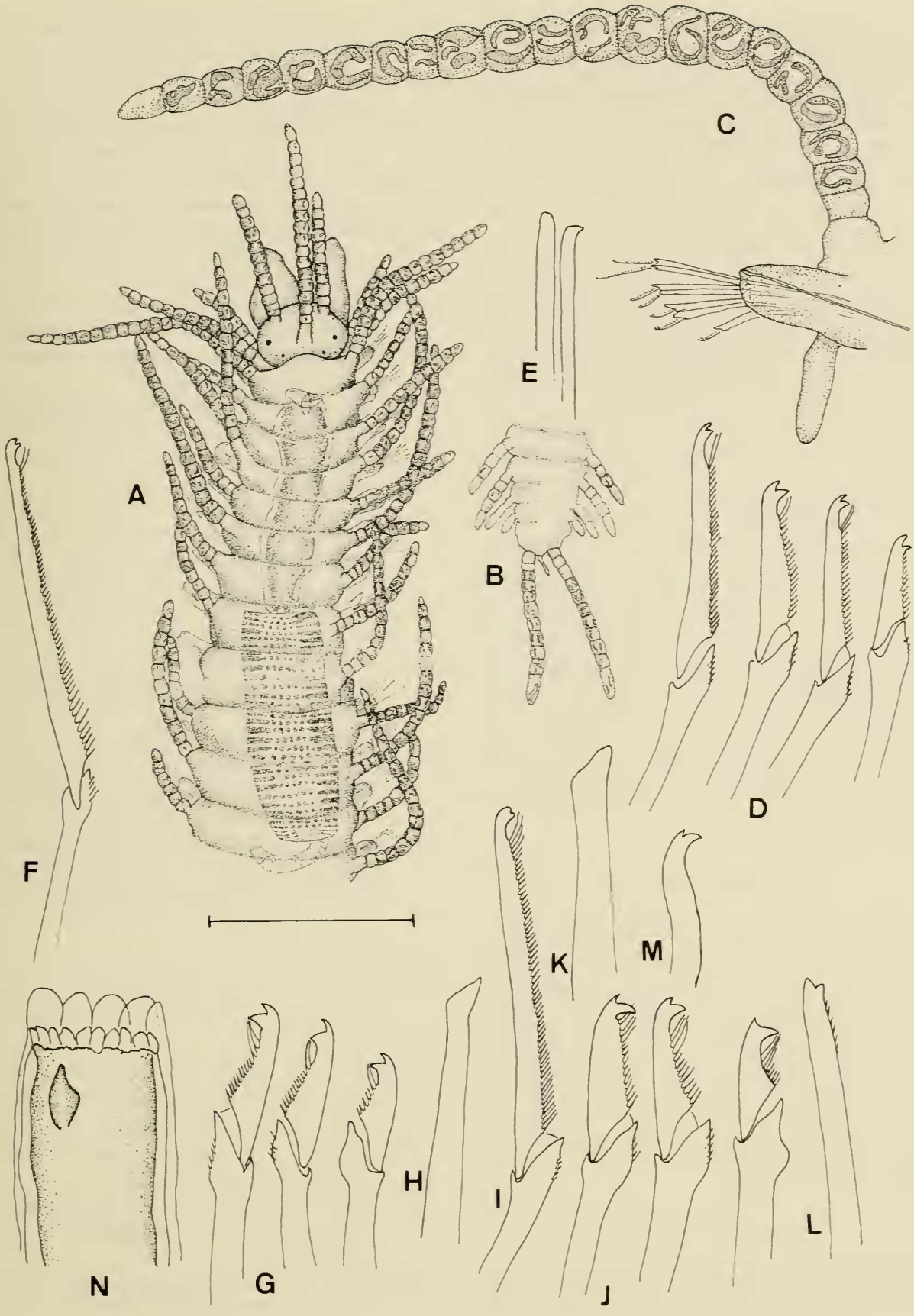

Fig. 1. *Dentatisyllis junoyi,* n. sp.: A, Anterior end, dorsal view; B, Posterior end, dorsal view; C, Midbody parapodium; D, Falcigerous setae of anterior parapodium; E, Acicula (same parapodium as D); F, Spiniger-like setae of median parapodium; G, Falcigerous setae (same parapodium as F); H, Aciculum (same parapodium as F); I, Spiniger-like seta of posterior parapodium; J, Falcigerous setae (same parapodium as J); K, Aciculum (same parapodium as J); L, Dorsal simple seta (same parapodium as J); M, Ventral simple seta of far posterior parapodium; N, Anterior end of pharynx. Scale: A, B: 1.97 mm; C: 0.64 mm; D, E, F, G, H, I, J, K, L, M: 20 μm; N: 0.64 mm.

tails of falcigerous blades. Anterior rim of pharynx of all these species has not been examined to study the presence of denticles; perhaps some of them could belong to the genus *Dentatisyllis*. The following species of *Syllis* have spiniger-like setae that are similar to *D. junoyi*: *Syllis* cf. *lutea* of Uebelacker (1984:30–136) has spiniger-like setae with short teeth, ventral simple setae that have short proximal teeth and falcigers that do not have long spines on the margin of the blade; and *Syllis rosea* (Langerhans 1879: 538, Imajima 1966:529, Campoy 1982:395, San Martín 1984:335) has spiniger-like setae with rounded tips on posterior setigers but has dorsal simple setae that are truncated, ventral simple setae that have a short proximal tooth, acicula that are bluntly rounded and falcigers that have a short proximal tooth. *Dentatisyllis carolinae* (Day 1973:30, Perkins 1981:1166, Uebelacker 1984:30–115) has falcigerous setae very similar to those of *D. junoyi* but lacks spiniger-like setae and has much longer cirri, truncate dorsal simple setae, serrate ventral simple setae and 10 teeth on the pharyngeal margin instead of 20.

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